

PCT

RAW SEQUENCE LISTING DATE: 03/09/2005 PATENT APPLICATION: US/10/526,060 TIME: 15:14:39

Input Set : A:\seqlist.txt

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4 <110> APPLICANT: ASHMAN, Claire
             ELLIS, Jonathan Henry
     7 <120> TITLE OF INVENTION: IMMUNOGENIC COMPOSITION COMPRISING AN
             IL-13 ELEMENT AND T CELL EPITOPES, AND ITS THERAPEUTIC USE
     11 <130> FILE REFERENCE: PG4938
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/526,060
C--> 14 <141> CURRENT FILING DATE: 2005-02-28
     16 <150> PRIOR APPLICATION NUMBER: PCT/GB03/03703
     17 <151> PRIOR FILING DATE: 2003-08-28
    19 <150> PRIOR APPLICATION NUMBER: GB 0304672.9
    20 <151> PRIOR FILING DATE: 2003-02-28
     22 <150> PRIOR APPLICATION NUMBER: GB 0220212.5
     23 <151> PRIOR FILING DATE: 2002-08-30
     25 <160> NUMBER OF SEQ ID NOS: 68
    27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     29 <210> SEQ ID NO: 1
     30 <211> LENGTH: 112
     31 <212> TYPE: PRT
     32 <213> ORGANISM: Homo sapien IL-13
     34 <400> SEQUENCE: 1
     35 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu
                         5
    37 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
                    20
                                        25
    39 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu
                                    40
    41 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
                                55
     43 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
                            70
    45 Ser Leu His Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
                       85
                                            90
    47 Asp Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn
    48
                    100
    51 <210> SEQ ID NO: 2
    52 <211> LENGTH: 111
    53 <212> TYPE: PRT
    54 <213> ORGANISM: Murine IL-13
    56 <400> SEQUENCE: 2
    57 Gly Pro Val Pro Arg Ser Val Ser Leu Pro Leu Thr Leu Lys Glu Leu
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    59 Ile Glu Glu Leu Ser Asn Ile Thr Gln Asp Gln Thr Pro Leu Cys Asn
                    20
    60
                                        25
```

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61 Gly Ser Met Val Trp Ser Val Asp Leu Ala Ala Gly Gly Phe Cys Val
63 Ala Leu Asp Ser Leu Thr Asn Ile Ser Asn Cys Asn Ala Ile Tyr Arg
65 Thr Gln Arg Ile Leu His Gly Leu Cys Asn Arg Lys Ala Pro Thr Thr
                      70
                                           75
67 Val Ser Ser Leu Pro Asp Thr Lys Ile Glu Val Ala His Phe Ile Thr
69 Lys Leu Leu Ser Tyr Thr Lys Gln Leu Phe Arg His Gly Pro Phe
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 111
75 <212> TYPE: PRT
76 <213> ORGANISM: Porcine IL-13
78 <400> SEQUENCE: 3
79 Gly Pro Val Pro Pro His Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu
                                       10
81 Leu Val Asn Ile Thr Gln Asn Gln Lys Thr Pro Leu Cys Asn Gly Ser
   20
                                   25
83 Met Val Trp Ser Val Asn Leu Thr Thr Ser Met Gln Tyr Cys Ala Ala
                               40
85 Leu Glu Ser Leu Ile Asn Ile Ser Asp Cys Ser Ala Ile Gln Lys Thr
87 Gln Arg Met Leu Ser Ala Leu Cys Ser His Lys Pro Pro Ser Glu Gln
                      70
89 Val Pro Gly Lys His Ile Arg Asp Thr Lys Ile Glu Val Ala Gln Phe
91 Val Lys Asp Leu Leu Lys His Leu Arg Met Ile Phe Arg His Gly
              100
95 <210> SEQ ID NO: 4
96 <211> LENGTH: 112
97 <212> TYPE: PRT
98 <213> ORGANISM: Bovine IL-13
100 <400> SEQUENCE: 4
101 Ser Pro Val Pro Ser Ala Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
102 1
                    5
103 Val Asn Ile Thr Gln Asn Gln Lys Val Pro Leu Cys Asn Gly Ser Met
105 Val Trp Ser Leu Asn Leu Thr Ser Ser Met Tyr Cys Ala Ala Leu Asp
107 Ser Leu Ile Ser Ile Ser Asn Cys Ser Val Ile Gln Arg Thr Lys Lys
109 Met Leu Asn Ala Leu Cys Pro His Lys Pro Ser Ala Lys Gln Val Ser
111 Ser Glu Tyr Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Leu Lys
                                        90
113 Asp Leu Leu Arg His Ser Arg Ile Val Phe Arg Asn Glu Arg Phe Asn
117 <210> SEQ ID NO: 5
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Input Set : A:\seqlist.txt

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118 <211> LENGTH: 111
     119 <212> TYPE: PRT
     120 <213> ORGANISM: Canine IL-13
     122 <400> SEQUENCE: 5
     123 Ser Pro Val Thr Pro Ser Pro Thr Leu Lys Glu Leu Ile Glu Glu Leu
                         5
                                             10
     125 Val Asn Ile Thr Gln Asn Gln Ala Ser Leu Cys Asn Gly Ser Met Val
     127 Trp Ser Val Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu Ser
     129 Leu Ile Asn Val Ser Asp Cys Ser Ala Ile Gln Arg Thr Gln Arg Met
                                 55
     131 Leu Lys Ala Leu Cys Ser Gln Lys Pro Ala Ala Gly Gln Ile Ser Ser
     133 Glu Arg Ser Arg Asp Thr Lys Ile Glu Val Ile Gln Leu Val Lys Asn
     135 Leu Leu Thr Tyr Val Arg Gly Val Tyr Arg His Gly Asn Phe Arg
     136
          100
                                         105
     139 <210> SEQ ID NO: 6
     140 <211> LENGTH: 111
     141 <212> TYPE: PRT
     142 <213> ORGANISM: Rat IL-13
     143 <400> SEQUENCE: 6
     144 Gly Pro Val Arg Arg Ser Thr Ser Pro Pro Val Ala Leu Arg Glu Leu
     145 1
                                             10
     146 Ile Glu Glu Leu Ser Asn Ile Thr Gln Asp Gln Lys Thr Ser Leu Cys
     148 Asn Ser Ser Met Val Trp Ser Val Asp Leu Thr Ala Gly Gly Phe Cys
     150 Ala Ala Leu Glu Ser Leu Thr Asn Ile Ser Ser Cys Asn Ala Ile His
     152 Arg Thr Gln Arg Ile Leu Asn Gly Leu Cys Asn Gln Lys Ala Ser Asp
    154 Val Ala Ser Ser Pro Pro Asp Thr Lys Ile Glu Val Ala Gln Phe Ile
                        85
    156 Ser Lys Leu Leu Asn Tyr Ser Lys Gln Leu Phe Arg Tyr Gly His
    157
                    100
                                         105
    160 <210> SEQ ID NO: 7
     161 <211> LENGTH: 111
    162 <212> TYPE: PRT
    163 <213> ORGANISM: Cynomolgus
W--> 164 il-13 --
    166 <400> SEQUENCE: 7
    167 Ser Pro Val Pro Pro Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
     169 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
                   20
    171 Val Trp Ser Ile Asn Leu Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
    172
```

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Input Set : A:\seqlist.txt

```
173 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
175 Met Leu Asn Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
177 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
                  85
                                       90
179 Asp Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Gln Phe Asn
              100
183 <210> SEQ ID NO: 8
184 <211> LENGTH: 112
185 <212> TYPE: PRT
186 <213> ORGANISM: Rhesus IL-13
188 <400> SEQUENCE: 8
189 Ser Pro Val Pro Arg Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
191 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
              20
193 Val Trp Ser Ile Asn Leu Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
    35
195 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arq
                           55
197 Met Leu Asn Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
                       70
199 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
                   85
201 Asp Leu Leu Val His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn
202 ' 100
205 <210> SEQ ID NO: 9
206 <211> LENGTH: 112
207 <212> TYPE: PRT
208 <213> ORGANISM: Marmoset IL-13
210 <400> SEQUENCE: 9
211 Gly Pro Val Pro Pro Tyr Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
                   5
213 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
               20
                                   25
215 Val Trp Ser Ile Asn Met Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
217 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
219 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
221 Ser Leu Leu Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
                                       90
223 Asp Leu Leu Arg His Leu Arg Lys Leu Phe His Gln Gly Thr Phe Asn
              100
                                   105
227 <210> SEQ ID NO: 10
228 <211> LENGTH: 112
229 <212> TYPE: PRT
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RAW SEQUENCE LISTING DATE: 03/09/2005 PATENT APPLICATION: US/10/526,060 TIME: 15:14:39

Input Set : A:\seqlist.txt

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230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
235 <400> SEQUENCE: 10
236 Gly Pro Val Pro Pro Ser Ser Ala Leu Lys Glu Leu Ile Glu Glu Leu
                    5
                                        10
238 Ala Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
240 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Asp
242 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Arg Thr Gln Arg
244 Ile Leu Ser Ala Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
245 65
246 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Thr
248 Asp Leu Leu Val His Leu Lys Arg Leu Phe Arg Gln Gly Thr Phe Asn
249
     100
                                    105
252 <210> SEQ ID NO: 11
253 <211> LENGTH: 121
254 <212> TYPE: PRT
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
260 <400> SEQUENCE: 11
261 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu
                    5
263 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
                                    25
265 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu
267 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
269 Met Leu Gly Gly Phe Cys Pro His Lys Phe Asn Asn Phe Thr Val Ser
                                            75
271 Phe Trp Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Asp Thr
                   85
                                        90
273 Lys Ile Glu Val Ala Gln Phe Val Lys Asp Leu Leu His Leu Lys
               100
275 Lys Leu Phe Arg Glu Gly Arg Phe Asn
           115
279 <210> SEO ID NO: 12
280 <211> LENGTH: 133
281 <212> TYPE: PRT
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
287 <400> SEQUENCE: 12
288 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser
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VERIFICATION SUMMARY

DATE: 03/09/2005

PATENT APPLICATION: US/10/526,060

TIME: 15:14:40

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\03092005\J526060.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:164 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: